



TQPP
tecnologie del movimento

Window Automation

WINDOW AUTOMATION

A full range of chain, stem and rack actuators designed to operate any kind of windows, domes and louvers in natural ventilation and in smoke evacuation systems.

NATURAL VENTILATION

C20



C30



C40



C60



C130



TQPP
tecnologie del movimento

C160



C240



ACK4



T50



T80



SMOKE EVACUATION

ACK4 RWA



C160 RWA



T80 RWA



C20

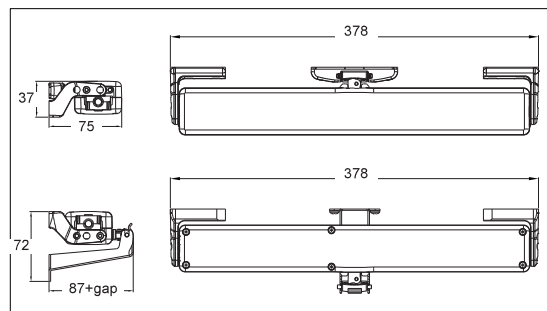
Chain actuator
Thrust force 300 N
Max stroke 360 mm

TANDEM



DESCRIPTION FOR TECHNICAL SPECIFICATIONS

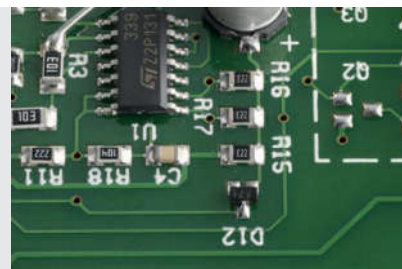
Electric C20 actuator with double link articulated chain, enclosed in a special casing, with different mounting accessories for top and bottom hung windows. Operation at 230V 50Hz or, as an alternative, at 24V DC. Maximum applicable load 300N. Fast hooking and unhooking system of the chain to the window. Adjustment of the stroke at 240 or 360mm by an external knob. CE marked device.



Double link chain with very high resistance on top loads



High stroke, together with a slim and attractive housing, to allow applications that require minimum size (International patent on the chain path)



Stroke end by amperometric absorption in closing to avoid chain adjustments in closing and any possible installation mistake.

TECHNICAL CHARACTERISTICS

	C20 230V	C20 24V
Power supply voltage	230V ~ 50Hz	min 21V ~ max 28V DC
Max applicable load in thrust		300 N
Max applicable load in traction		200 N
Stroke		240 and 360mm
Absorbed current	0,12 A	0,43 A
Idle translation speed	8 mm/s	7,5 mm/s
Duration of the idle stroke	46 s	48 s
Double insulated	YES	-
Service type		S2 of 4 min
Operating temperature		-5°C +50°C
Protection Class		IP 30
Stroke end regulation in closing		not necessary
Parallel connection option		YES
Stroke end	Electronic in opening, by amperometric absorption in closing	
Dimensions	362x48x34 mm	
Weight	0,970 kg	0,940 kg

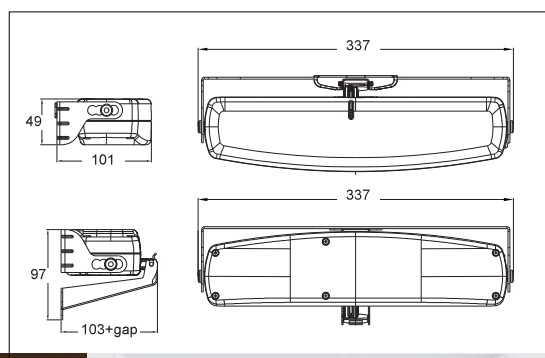
C30

Chain actuator
Thrust force 300 N
Max stroke 380 mm



DESCRIPTION FOR TECHNICAL SPECIFICATIONS

Electric C30 actuator with double link articulated chain, enclosed in a special casing, with different mounting accessories for top and bottom hung windows. Operation at 230V 50Hz or, as an alternative, at 24V DC. Maximum applicable load 300N. Fast hooking and unhooking system of the chain to the window. Adjustment of the stroke at 200 or 380mm by an external knob. Electronic device with acoustic warning to signal erroneous installation to the user. Upon request, a preset "S" version for the synchronous operation of more actuators on the same window is available. CE marked device.



Telescopic chain end providing a rapid adjusting from 0 to 15mm, even with chain completely retracted into the actuator housing, that allows easy application on windows with overlap.



Easy fixing system, fit for windows of any type and size.



Double link chain with very high resistance on top loads.

TECHNICAL CHARACTERISTICS

	C30 230V	C30 24V
Power supply voltage	230V ~ 50Hz	24V DC
Maximum applicable load in thrust		300 N
Maximum applicable load in traction		300 N
Strokes		200 and 380 mm
Absorbed current	0,26 A	1,3 A
Idle translation speed	27 mm/s	17 mm/s
Duration of the idle stroke	14 s	22 s
Double insulated	YES	-
Service Type		S2 of 4 min
Operating temperature		-5°C +50°C
Protection Class		IP 30
Adjustment of the window frame connection		15 mm
Adjustment of pins for the swivel brackets		15 mm
Parallel connection option		YES
Synchronous operation of more actuators on the same window		with S version
Chain position control		YES
Stroke end		encoder
Electronic device with acoustic warning to signal erroneous installation (Buzzer)		YES
Dimensions		337,2x80x49 mm
Weight		1,1 kg

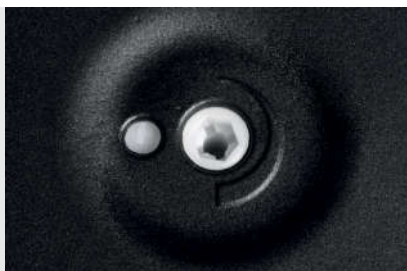
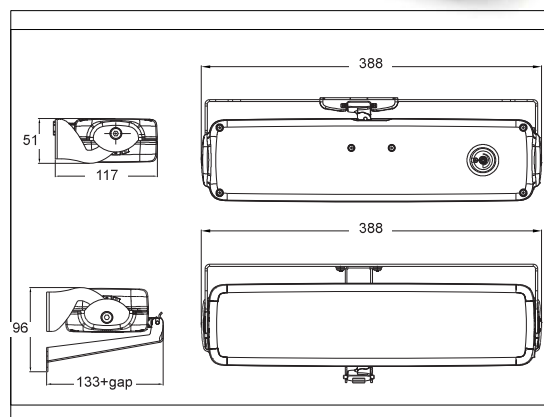
C40

Chain actuator
Thrust force 400 N
Adjustable stroke max. 500mm

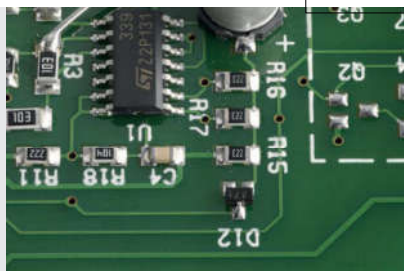


DESCRIPTION FOR TECHNICAL SPECIFICATIONS

Electric C40 actuator with double link articulated chain, enclosed in a special casing, with different mounting accessories for top and bottom hung windows. Operation at 230V 50Hz or, as an alternative, at 24V DC. Maximum applicable load 400N. Fast hooking and unhooking system of the chain to the window. Max. stroke 500mm, end of stroke adjustable at 100, 150, 200, 205, 300, 350, 400 mm by an external knob located on both sides of the actuator. Electronic device with acoustic warning to signal erroneous installation to the user. Electronic traction control speed reduction, during the last 100mm of closing action. High protection IP 55 rated. Upon request, a preset "S" version for the synchronous operation of more actuators on the same window is available. CE marked device.



Easy stroke adjustment (7 positions from 100 to 500mm)



Electronic traction control speed reduction to avoid chain adjustments in closing and avoid any possible installation mistake



High protection IP 55 rated

TECHNICAL CHARACTERISTICS

	C40 230V	C40 24V
Power supply voltage	230V ~ 50Hz	24V DC
Maximum applicable load in thrust		400 N
Maximum applicable load in traction		400 N
Strokes		100 - 150 - 200 - 250 - 300 - 400 - 500 mm
Absorbed current	0,24 A	1,1 A
Idle translation speed	18,5 mm/s	10,5 mm/s
Duration of the idle stroke	27 s	48 s
Double insulated	si	-
Service Type	S2 of 5 min	S2 of 8 min
Operating temperature		- 5°C + 50°C
Protection Class		IP 55
Adjustment of the window frame hooking system		not necessary
Parallel connection option		YES
Synchronous operation of more actuators on the same window		with S version
Chain position control		YES
Stroke end		Electronic in opening, by amperometric absorption in closing
Electronic device with acoustic warning to signal erroneous installation (buzzer)		YES
Dimensions		387,6x95x50 mm
Weight		1,9 kg

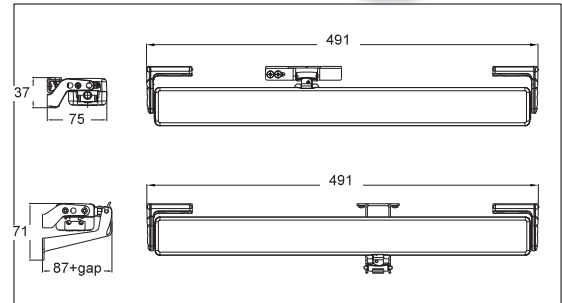
C60

Chain actuator
Thrust force 300N
Max stroke 600 mm



DESCRIPTION FOR TECHNICAL SPECIFICATIONS

Electric C60 actuator with double link articulated chain, enclosed in a special casing, with different mounting accessories for top and bottom hung windows. Operation at 230V 50Hz or, as an alternative, at 24V DC. Maximum applicable load 300N. Adjustment of the stroke at 510 or 600mm by an external knob. CE marked device.



High stroke, together with a slim and attractive housing, to allow applications that require minimum size.

Special hooking of chain to window to guarantee very high resistance with high stroke even on top hung windows.

Simple swivel bracket for fast installation.

TECHNICAL CHARACTERISTICS

	C60 230V	C60 24V
Power supply voltage	230V ~ 50Hz	24V DC
Max applicable load in thrust	300N (max. stroke 510) - 250N (max. stroke 600)	
Max applicable load in traction	200N	
Strokes	510 mm and 600 mm	
Absorbed current	0,14 A	0,49 A
Idle translation speed	8 mm/s	7,5 mm/s
Duration of the idle stroke	75 s	80 s
Double insulated	YES	-
Service Type	S2 of 4 min	
Operating temperature	-5°C +50°C	
Protection Class	IP 30	
Parallel connection option	YES	
Synchronous operation of more actuators on the same window	with S version	
Stroke end	Electronic in opening, by amperometric absorption in closing	
Dimensions	470x48x34 mm	
Weight	1,5 kg	

C130

C240

Chain actuator
Thrust force 300N
Max stroke 360mm
Single push point

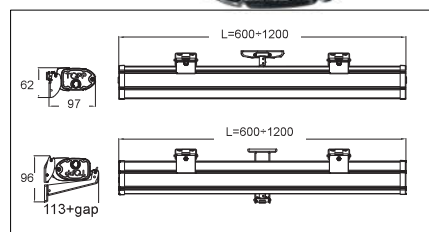
Chain actuator
Thrust force 400N
Max stroke 360mm
Dual push points



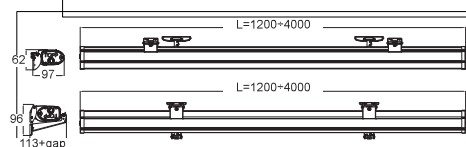
DESCRIPTION FOR TECHNICAL SPECIFICATIONS

Electric actuator Topp models C130 (single push point) and C240 (dual push point) with double-link chain, in an elegant die-cast aluminium profile, with custom-made length from 600 mm to 1200 mm (C130) and from 1200mm to 4000mm (C240), complete with brackets and accessories for top and bottom hung windows. Operation at 230V ~ 50Hz or, as an alternative, at 24V d.c. Max. thrust force (C130) and 400N (C240). Fast hooking and unhooking system to the window frame. Max. stroke 360 mm. CE marked device.

C130



C240



Tailored profile lengths according to the window frame width



Cable exit on both sides of the profile



Innovative and original design

CARATTERISTICHE TECNICHE

	C130 230V	C130 24V	C240 230V	C240 24V
Power supply voltage	230V ~ 50Hz	min 21V ~ max 28V DC	230V ~ 50Hz	min 21V ~ max 28V DC
Max applicable load in thrust	300 N	300 N	400 N	400 N
Max applicable load in traction	200 N	200 N	300 N	300 N
Stroke	360 mm	360 mm	360 mm	360 mm
Absorbed current	0,12 A	0,43 A	0,22 A	0,75 A
Idle translation speed	8 mm/s	8 mm/s	8 mm/s	7,5 mm/s
Duration of the idle stroke	46 s	48 s	46 s	48 s
Double insulated	YES	-	YES	-
Service type	S2 of 4 min	S2 of 4 min	S2 of 4 min	S2 of 4 min
Operating temperature	- 5°C + 50°C	- 5°C + 50°C	- 5°C + 50°C	- 5°C + 50°C
Protection Class	IP 30	IP 30	IP 30	IP 30
Stroke end regulation in closure	not necessary	not necessary	not necessary	not necessary
Connection of two or more actuators in parallel	YES	YES	YES	YES
Stroke end	Electronic in opening, by amperometric absorption in closing	Electronic in opening, by amperometric absorption in closing	Electronic in opening, by amperometric absorption in closing	Electronic in opening, by amperometric absorption in closing

C160

C160RWA

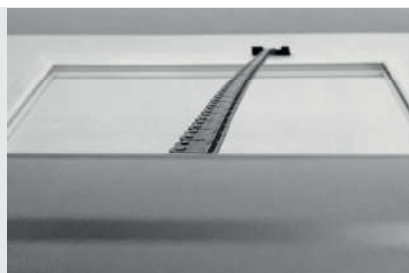
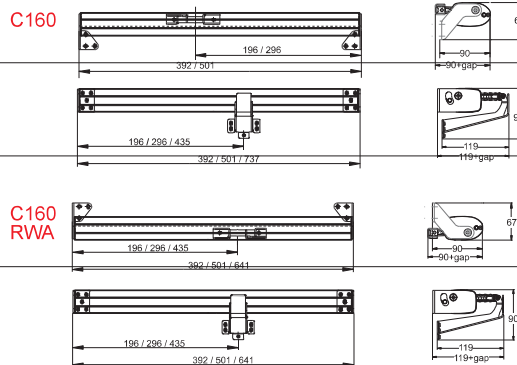
Chain actuator
Thrust force 300N
Stroke 360mm - 600mm - 1000mm

TANDEM RWA



DESCRIPTION FOR TECHNICAL SPECIFICATIONS

Electric actuator Topp models C160 and C160 RWA with double-link chain, complete with brackets and accessories for top or bottom hung windows. Operation at 230V ~ 50Hz. (C160) and 24V (C160RWA). Max. thrust force 300N. Stroke 360 - 600 - 1000 mm. CE marked device, C160 RWA tested in accordance with the EN12101-2 European Standard about smoke and heat evacuation systems.



Elegant and attractive aluminium profile with swivel brackets versatile and easy to install.



Available also for installation on side hung windows.



Long chain up to 1 meter enclosed in a slim housing (actuator 656mm wide).

TECHNICAL CHARACTERISTICS	C160 360	C160 600	C160 1000	C160 360 RWA	C160 600 RWA	C160 1000 RWA
Power voltage:	230V ~ 50Hz	230V ~ 50Hz	230V ~ 50Hz	24V	24V	24V
Max applicable load in thrust	300 N	250 N	50 N	300 N	250 N	50 N
Max applicable load in traction	200 N	200 N	185 N	200 N	185 N	185 N
Stroke for top-hung application	360 mm	600 mm	1000 mm	360 mm	600 mm	1000 mm
Stroke for bottom-hung application	322 mm	562 mm	962 mm	322 mm	562 mm	962 mm
Absorbed current	0,12 A	0,14 A	0,14 A	0,43 A	0,60 A	0,60 A
Idle translation speed	8 mm/s	8 mm/s	8 mm/s	7,5 mm/s	9,5 mm/s	9,5 mm/s
Duration of the idle stroke *	46 s	75 s	125 s	48 s	60 s	105 s
Double insulated	YES	YES	YES	-	-	-
Service type	S2 of 4 min					
Operating temperature	-5° +50°					
Protection Class	IP30					
Stroke end regulation in closure	not necessary					
Parallel connection option	YES					
Possibility of installing double push point on the same window	YES	NO	NO	YES	NO	NO
Stroke end	Electronic in opening, by amperometric absorption in closing					

* Version for RWA application: max opening time 60s.

ACK4

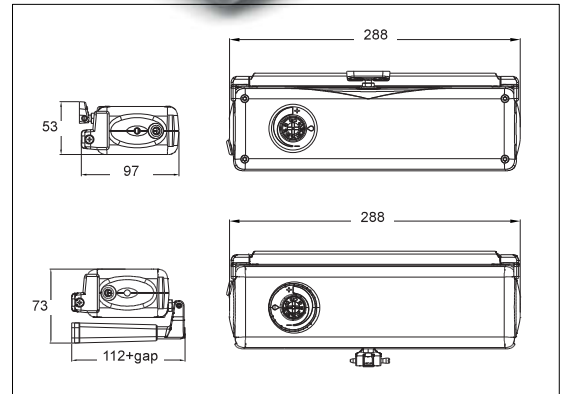
Chain actuator
Thrust force 300N
Adjustable stroke max. 400mm

ACK4RWA



DESCRIPTION FOR TECHNICAL SPECIFICATIONS

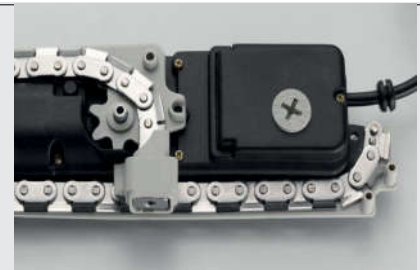
Electric actuator Topp models ACK4 (230V) and ACK4 RWA (24V) with a double link articulated stainless steel chain, enclosed in a special diecast aluminum casing, painted with epoxy powders, with different mounting accessories for top and bottom hung windows. Operation at 24V DC. (ACK4 RWA) and 230V (ACK4). Max. traction and thrust force 300N. End of stroke adjustable at 100, 150, 200, 205, 300, 350, 400 mm by an external knob located on both sides of the actuator. Electronic device with acoustic warning to signal erroneous installation (buzzer) Upon request, a preset "S" version for the synchronous operation of more actuators on the same window is available. High protection IP 55 rated. CE marked device, ACK4 RWA tested in accordance with the EN12101-2 Standard for smoke ventilation applications.



Easy stroke adjustment (7 positions from 100 to 400mm) - International patent



Double link articulated stainless steel chain.



High protection IP 55 rated.

TECHNICAL CHARACTERISTICS

	ACK4 24V	ACK4 230V
Power supply voltage	24V	230V ~ 50Hz
Maximum applicable load in thrust	300 N	300 N
Maximum applicable load in traction	300 N	300 N
Strokes	100 - 150 - 200 - 250 - 300 - 350 - 400 mm	100 - 150 - 200 - 250 - 300 - 350 - 400 mm
Absorbed current	1,35 A	0,32 A
Idle translation speed	17 mm/s	27 mm/s
Duration of the idle stroke	23 s	15 s
Double insulated	YES	YES
Service Type	S2 of 3 min	S2 of 2 min
Operating temperature	- 5°C + 50°C	- 5°C + 50°C
Protection Class	IP 55	IP 55
Adjustment of the window frame hooking system	10 mm	10 mm
Parallel connection option	YES	YES
Synchronous operation of more actuators on the same window	with S version	with S version
Chain position control	YES	YES
Stroke end	encoder	encoder
Acoustic device that warns of any eventual incorrect installations (buzzer)	YES	YES
Dimensions	288,5x83x47,8 mm	288,5x83x47,8 mm
Weight	1,9 kg	1,9 kg

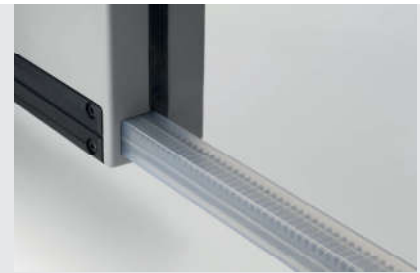
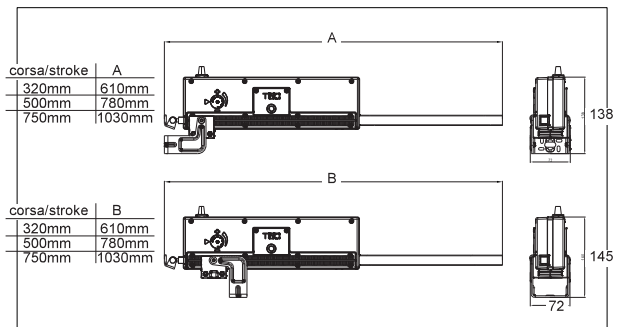
T50

Rack actuator
Thrust force 500N
Adjustable stroke
Max. 1000 mm



DESCRIPTION FOR TECHNICAL SPECIFICATIONS

Linear electrical actuator, model T50, with self-aligning swivel movement, with stroke, complete with brackets and fitting accessories for top hung windows. Available at 230V 50Hz or at 24V DC. Max. applicable force 500N, max. stroke 1000mm +/- 20mm. Stroke adjustable about every 50mm by external adjusting selector. Preset for the mechanical connection of 2 or more push points by transmission rod. S version for simultaneous synchronization and operation of more actuators installed on a single window (without connecting bar) available on demand. CE marked device.



Connection of several drives by adding rapid-coupling connecting rods and rack groups for the installation in particularly large windows.

Rapid coupling system even when disconnected from the power supply due to the easy adjustment of the self-aligning sliding bracket that provides for the adjustment of the end of stroke every 2mm.

High protection IP 55 rated.

TECHNICAL CHARACTERISTICS

	T50 230V	T50 24V
Power supply voltage	230V ~ 50Hz	24 V DC
Max. applicable load		500 N
Max. applicable load tandem version (1 master + 1 slave)		500 N
Max. applicable load tandem version (1 master + 1 master)		700 N
Max. applicable load tandem version (1 master + 2 slaves)*		450 N
Distance between 2 push points		max 2,4m - min 1m (1,5m between 2 masters)
Available strokes (+/- 20mm) T50 mod. 320		150 - 200 - 250 - 320 mm
Available strokes (+/- 20mm) T50 mod. 500		150 - 200 - 250 - 320 - 400 - 450 - 500 mm
Available strokes (+/- 20mm) T50 mod. 750		180 - 280 - 370 - 470 - 560 - 650 - 750 mm
Available strokes (+/- 20mm) T50 mod. 1000		Adjustable on demand
Absorbed current at max. load	0,3 A	1,4 A
Idle translation speed	18 mm/s	10 mm/s
Duration of the idle stroke		(stroke/idle translation speed)
Double insulated	YES	-
Service type		S2 of 4 min
Operating temperature		-5°C +55°C
Protection Class		IP 55
Parallel connection option		YES
Adjustment of stroke end and strokes		encoder
Dimensions		from 610 up to 1030x62x94 mm

* Operation up to 6 drives on the same window frame is possible by transmission rod. Ask our technical dept. for the placement of the pushing points and the calculation of the thrust force.

T80

Rack actuator
Thrust force 800N
Max. stroke 1000mm

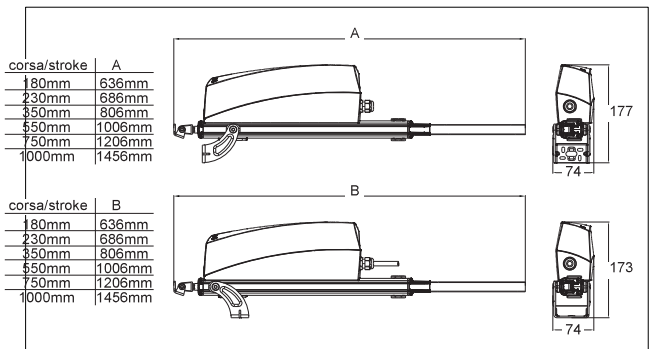
T80 RWA



DESCRIPTION FOR TECHNICAL SPECIFICATIONS

Powerful electric rack actuator models T80 (230V) and T80 RWA (24V) with tilting self-aligning movement, with brackets and accessories for top hung windows. Operation at 230V~50Hz.(T80) or 24V DC (T80 RWA). Max. recommended load 800N. Max. stroke 1000mm. Pre-set for the mechanical or electronic connection of two or more push-points by transmission rod. Limit switch by Diodo hall. CE marked device, T80 RWA tested in accordance with the EN12101-2 standard for smoke ventilation applications.

UNTIL EXHAUSTION.



Rapid coupling system even when disconnected from the power supply provided by the easy dovetail of the stainless steel bracket on the side tracks



High protection IP 55 rated



Special rack with very high resistance on top loads

TECHNICAL CHARACTERISTICS

	T80 230V	T80 24V
Power supply voltage	230V ~ 50Hz	24V
Max recommended load	800 N	800 N
Max recommended load 2 push points (1 master + 1 slave)	750 N	750 N
Max recommended load 2 push points (1 master + 1 master)	1200 N	1200 N
Max recommended load 3 push points (1 master + 2 slaves)*	700 N	700 N
Distance between 2 push points	max 3 m - min 1 m	max 3 m - min 1 m
Strokes	180 - 230 - 350 - 550 - 750 - 1000 mm	180 - 230 - 350 - 550 - 750 - 1000 mm
Absorbed current	0,3 A	1,4 A
Idle translation speed	12 mm/s	14 mm/s
Double insulated	YES	YES
Service type	S2 of 4 min	S2 of 4 min
Operating temperature	- 5°C + 55°C	- 5°C + 50°C
Protection Class	IP 55	IP 55
Parallel connection option	YES	YES
Connection and synchronisation possibility on the same window	mechanical, by transmission rod	mechanical, by transmission rod
End of stroke	electronic	electronic
Dimensions	from 571,6 up to 1391,6x68,7x137,4 mm	from 571,6 up to 1391,6x68,7x137,4 mm

* Operation up to 6 drives on the same window frame is possible by transmission rod. Ask our technical dept. for the placement of the pushing points and the calculation of the thrust force.

WINDOW AUTOMATION



	C20	C30	C40	C60	ACK4	C130	C160	C240	SL60	T50	T80
Max. load in thrust (N)	300	300	400	300	300	300	300	300	600	500	800
Max. load in traction (N)	200	300	400	200	300	200	200	200	500	500	800
Max. stroke (mm)	360	380	500	600	400	360	1000	360	750	1000	1000
User stroke selection (positions)	2	2	7	2	7	-	-	-	-	7	-
Adjustment range to the frame (mm)	>100	30	100	>100	10 (+30)	>100	>100	>100	>100	>100	>100
Self-learning adjustment in closing	●	○	●	●	○	●	●	●	-	○	-
2 push points on same window	○	○	○	-	○	○	-	●	-	○	○
Synchronization by microprocessor	-	○	○	-	○	-	-	-	-	○	-
Quick hooking to the window frame	●	●	●	-	-	●	-	●	-	-	-
Central chain	●	●	●	-	●	●	○	○	-	-	-
Swivel brackets	●	●	●	●	○	●	●	●	●	●	●
Brackets for top hinged windows	●	●	●	●	●	●	●	●	●	●	●
Brackets for bottom hinged windows	●	●	●	●	●	○	○	○	-	-	-
Brackets for roof windows/skylights	○	○	○	○	○	○	○	○	●	●	●
Brackets for swing windows	○	-	-	○	-	○	○	○	●	●	●
Brackets for louvers	-	-	-	-	-	-	-	-	○	-	-
Wrong installation warning device	-	●	●	-	●	-	-	-	-	●	-
Double insulation	●	●	●	●	●	●	●	●	●	●	●
0.5 meter power cable	-	-	-	-	-	-	-	-	-	-	-
1.5 meter power cable	●	●	●	●	●	●	●	●	●	●	●
Above 1.5 meter power cable	○	○	○	○	○	○	○	○	○	○	○
RWA	-	-	-	-	○	-	○	○	-	-	●
On board receiver	-	○	-	-	-	○	○	○	-	-	-
IP 55	-	-	●	-	●	-	-	-	●	●	●
Stainless steel chain	-	-	-	-	●	-	-	-	-	-	-
Customizable width of the actuator	-	-	-	-	-	●	○	●	-	-	-
Automation height (mm)	34	49	50	34	48	46	46	46	104	94	137
Automation depth (mm)	48	80	95	48	83	80	80	80	47	62	69
Automation max. width (mm)	362	337	388	470	288	1200	735	4000	907	1030	1392

Legend

- Included
- Not Available
- Optional

